Amendments to the Specification:

Please replace paragraph [0017] with the following amended paragraph:

[0017] Referring back to FIG. 1a, conducting vias, 111, 112 and 113, are formed within the MPCB 100 in order to route the power and ground signals from the core layers 102 and 103 to the surface layers, comprised of the first layer 101 and the fourth layer 104. A first conducting via 111 is used to route electrical signals between the first layer 101 and the second layer 102, a second conducting via 112 is used to route electrical signals between the second layer 102 and the third layer 103. A third conducting via 113 is used to route electrical signals between the third layer 103~~113~~ and the fourth layer 104~~114~~. For example, in order to route power and ground signals to the first layer 101, the second conducting via 112 routes the power signal from the third layer 103~~113~~ to the second layer 102~~112~~ and the first conducting via routes the power signal from the second layer 102~~112~~ to the first layer 101~~111~~. Similarly, the third conducting via 113 is used to route the electrical signal between the fourth layer 104~~114~~ and the first layer using the first and second conducting vias. Thus, a plurality of the first through third conducting vias, 111 to 113, in conjunction with a plurality of conducting traces disposed on the first through fourth layers, 101 through 104, serve to route a plurality of electrical signals between any of the first through fourth layers, 101 through 104. Alternatively, a conducting via is formed from the first layer 101~~111~~ to the fourth layer 104~~114~~ for routing of a signal from the first layer 101~~111~~ to the fourth layer 104~~114~~. Of course, forming of conducting vias is dependent upon routing requirements for the MPCB 100, thus the conducting vias are formed as required in order to facilitate the routing.

Please replace paragraph [0024] with the following amended paragraph:

[0024] A plurality of vias, 210aa, 210ba, 210ab, 210bb, 210cb~~210bc~~, 210ac, 210bc, 210ad, 210bd and 210cd are formed between the first and fourth layers, 201 and 204, and each via from the plurality is disposed adjacent at least one of the second subset of the

plurality of electrical contacts, where the plurality of vias have a spacing therebetween that is larger than a spacing between each of the plurality of electrical contacts.

Please replace paragraph [0025] with the following amended paragraph:

[0025] With reference to the plurality of electrical contacts disposed in a first grid, in the form of a Cartesian grid, which is an array formed from columns and orthogonal rows, as shown in FIG. 2a and FIG. 2c, the routing strategy in accordance with the first embodiment of the invention reduces the tolerance problem by routing and drilling, to form vias, for alternate electrical contacts in a single signal row and for alternate electrical contacts in a single column, for all four rows. The electrical contacts are preferably disposed an intersections of the columns and orthogonal rows of the Cartesian grid. FIG. 2c illustrates an enlarged view of FIG. 2a in order to exemplify the properties of the invention. For the first row of electrical contacts 209a, electrical contacts 207aa, 207ca and 207ea are routed along the first layer using conducting traces. Electrical contacts 207ba and 207da are connected with electrically conducting traces formed on the first layer to vias 210aa and 210ba, respectively, for routing along the fourth layer 204. For the second row of electrical contacts 209b, electrical contacts 207ab, 207cb and 207eb are coupled using electrically conducting traces formed within the first layer 201 to vias 210ab, ~~and~~ 210bb, and 210cb, respectively, for routing within the fourth layer 204. Electrical contacts 207bb and 207db are routed within the first layer using conducting traces. For the third row of electrical contacts 209c, electrical contacts 207ac, 207cc and 207ec are routed within the first layer using conducting traces. Electrical contacts 207bc and 207dc are connected with electrically conducting traces formed within the first layer to vias 210ac and 210bc, respectively, for routing within the fourth layer 204. For the fourth row of electrical contacts 209d, electrical contacts 207ad, 207cd and 207ed are connected with electrically conducting traces formed on the first layer to vias 210ad, 210bd and 210cd, respectively, for routing within the fourth layer 204. Electrical contacts 207bd and 207dd are routed within the first layer using conducting traces.

Please replace the abstract with the abstract on the following page:

A multi layer circuit board (MPCB) is disclosed that is comprised of a first layer and a fourth layer substantially parallel to the first layer. Pluralities of electrical contacts are formed on the first layer of the multilayer circuit board and are disposed in a first grid. The plurality of electrical contacts are divided into a first subset for routing within the first layer, and a second subset for routing within the fourth layer. A plurality of vias are formed between the first and fourth layers and each disposed adjacent at least one of the second subset of the plurality of electrical contacts, the plurality of vias having a spacing between each pair thereof larger than a smallest spacing between adjacent electrical contacts of the plurality of electrical contacts.